Lecture 1:

Introduction

Thibault FALLY
C181 – International Trade
Spring 2018
About me:

- How to pronounce Thibault: “Tebow”
- I grew up in Paris
- Studied: at the Paris School of Economics (PhD), Harvard and Ecole Normale Superieure
- 4 years as an assistant professor at the University of Colorado-Boulder
- Moved to Berkeley 4 years ago
- Now: Assistant Professor at the Department of Agricultural and Resource Economics (ARE)
My area of expertise:

• International Trade
My areas of expertise:

• International Trade
• More specifically:
  
  – Preferences and income effects
  – Supply chains
  – Multinational firms
  – Gravity equations and the role of distance
  – Wage inequality
  – Financial constraints
  – Outsourcing vs. integration

• More info on my research on:
  
  http://are.berkeley.edu/~fally/
Introduction

• Course outline:
  – Methods and Topics

• Course requirements
  – Grading, exams, problem sets

• International Trade?
  – Some basic facts
Main topics

In this course, we will study international trade in goods and services.

We will learn the economic forces that determine what that trade looks like:

- what products are traded?
- who trades them?
  
  *(which countries? which firms? worker types?)*
- what the benefits and costs of trade?
- Impact of trade on inequality?

We will also learn about policies that governments use to shape trade patterns.
“Policy”: recent examples

Trade liberalization:
- GATT (Uruguay round), now called WTO
- Unilateral trade liberalization
- Demise of communist bloc
- NAFTA (and current renegotiations)
- TPP, TTIP, CETA
- Brexit

Opening to Foreign Investment:
- Most rich countries
- Eastern Europe
- East Asia, etc.
Think “General equilibrium”

One of the main goal of this course: 
Train you about thinking in terms of *general equilibrium*

Various markets adjust at the same time:

• import-competing vs export-oriented goods markets
• Labor markets for different type of workers
• Capital markets, markets for land
• Trade balance, etc.

If you focus on a one market and ignore adjustments in the others, you will likely get to the wrong conclusions
Road map

Based on the BOOK:

By Robert Feenstra and Alan Taylor
“International Trade”

2nd, 3rd or 4th Editions (very few changes between editions)

Exceptions: Chapter on Imperfect competition plus some other details (additional lectures notes will then be posted online)
Road map

• **Introduction:**
Where is the course going? What are the fundamental issues? (Ch 1)

• **Comparative Advantage:**
Why do country differences create gains from trade?
How does trade affect income distribution? (Chapters 2-4)

• **Multinational Firms and FDI:**
What effect does foreign investment have on wages?
Why do some firms become multinationals while others do not? (Chapter 5)

• **Offshoring, Trade and Wages:**
What is offshoring?
How is this trend different from earlier trends in globalization? (Chapter 7)
Road map (cont’d)

• **Increasing returns to scale & Imperfect Competition:**
  Does trade reduce monopoly power? What are the gains from increasing variety of consumption goods? Why is free trade with Canada is less controversial than free trade with Mexico or China? (Chapter 6)

• **Trade Policy:**
  What types of policies affect international trade and how? How trade policies of one country affect well-being in another? (Chapters 8 – 10)

• **Political Economy:**
  Why countries do not maximize welfare?
  Why some interest groups are favored over others?

• **International Trade Agreements:**
  What to make of the WTO? What to make of NAFTA? Why do we or do we not need agreements like the Kyoto protocol, TPP or TTIP? (Chapter 11)
Today:

• Course outline:
  – Methods and topics

• Course requirements
  – Grading, exams and problem sets

• International Trade?
  – Basic facts and definitions
Prerequisites

Intermediate Macro and Micro (100A&B or 101A&B)

Especially **micro**economics:

- Indifference curves
- PPF
- Consumer welfare
- Firm behavior, returns to scale, etc.
- But also some macro (e.g. MPL, MPK, w, r)

Not a lot of calculus but definitely some math (algebra)
Grading

1) Midterm: 25% each (*)
   • Wednesday, February 28th
   • Wednesday, April 18th

2) Final exam: 30% (*)
   • Friday, May 11th, 3 pm

3) Assignments (4 problem sets): 20%, i.e. 5% each

(*) If your final exam is better than your worse midterm, the final counts for 55% and your worse midterm is dropped:

<table>
<thead>
<tr>
<th>Weights</th>
<th>First midterm</th>
<th>Second midterm</th>
<th>Final exam</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>25%</td>
<td>25%</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>Alternative 2</td>
<td>25%</td>
<td>0%</td>
<td>55%</td>
<td>20%</td>
</tr>
<tr>
<td>Alternative 3</td>
<td>0%</td>
<td>25%</td>
<td>55%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Clickers

What for?

- **For you:** test whether you got it:

  ➔ Sometimes you may think that you follow...
          ...until you get a wrong answer!!

  ➔ Some quick training for the exam

- **For me:** check whether you follow and whether a point needs more explanation
Clickers

Clicker grade?

• Don’t sweat it out: everyone should have a clicker, but attendance is not mandatory

• I will compute a grade from the clicker participation, But this will only count as an optional assignment:
  
  ▪ **It will not count** if your clicker grade is below your assignments grade
  
  ▪ Counts only if clicker grade improves your average grade for assignments, by replacing your worst/missing assignment
How should you learn?

In class:
• Take notes (preferably no computer)
• No multi-tasking
• Answer clicker questions
• Go to the sections
How should you learn?

In class:
• Take notes (preferably no computer)
• No multi-tasking
• Answer clicker questions
• Go to the sections

At home:
Go back and forth from exercises to lecture notes
• When you can’t do an exercise, check your notes
• For each key part of the course, check several exercises (see list of key points before each exam)
• **Assignments** every two or three weeks
Attendance

• Attendance counts only through the clicker grades
• And thus it is NOT mandatory

HOWEVER:

• I observe a strong correlation between attendance and grades
• Studies have also pointed out a causal link between the two (even when attendance is not part of the grade)

➔ I will try to stimulate several ways to retain the material:
  – **Visual memory**: slides + graphs + calculation on blackboard
  – **Verbal memory**: repeating important points + careful with accent
  – **Active learning**: clicker questions + other questions in class
First problem sets

First PS already available on bcourse:
- Review of basic concepts from micro
- Ricardo for one country
- Terms of trade effects

Due February 5\textsuperscript{th}

- Second problem set: due February 22\textsuperscript{nd}
  (one week before first midterm)
- Third and fourth problem sets: before 2\textsuperscript{nd} midterm
- Problem sets to be handed in pdf format
How should I teach?

Technology:
• Mostly slides: lots of graphs!
• Some of the math on the blackboard
  – But harder to do for a 200-students class

Structure:
• Same structure as the book in terms of chapters
  – With extra content on firms, multinationals and examples of trade liberalization episodes
• But what matters for exams is what I do in class
I like feedback!

- Class participation: ask questions, answer questions
  - That’s why I use CLICKERS

- Interrupt me if you don’t understand what I say
  - Accent reduction training takes time...

- Don’t hesitate to come to office hours (GSI or me)

- **NEW THIS TERM:** Please post your question online (bcourse)
  - And come to office hours if the answer is not clear enough

- Raise a red flag if there is any issue

- There is (some) flexibility: if you would like to change something, we can work on it.
  - E.g. structure of exam, content of the lectures, etc.
Feedback from previous years

• What previous students liked about my course:
  - Nice slides
  - Use of economic theory to think about effect of trade
  - Examples taken from data and newspapers
  - Approachability, being open to feedback and improvements
  - Being close to the book? some people really liked it
  - Accent wasn’t an issue, with few exceptions

• What we will try to improve:
  - Blackboard for the math + graphs (improve writing)
  - Going faster during lectures?
  - Problem sets and sections: relation to exams
  - Lack of confidence
Diversity:

• Students in this course are more diverse than you think

• ...In dimensions that are particularly relevant to the course:
  – Many of you (and me) are foreigners.
  – Immigrants or related to immigrant
  – Some have family who lost their jobs before of trade
  – Some from China, etc.

• Please be respectful
  – People here are from the whole political spectrum

• I will often talk about politics
  – Trade is highly policy relevant these days
  – I will talk about the view of the majority of economists in my field, those may or may not correspond to my own opinions
  – There is more agreement among economists than people think
<table>
<thead>
<tr>
<th>Opinion in 2012 on…</th>
<th>Avg. American</th>
<th></th>
<th>Economists</th>
<th></th>
<th>Δ</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>School vouchers to public school students</td>
<td>56.29  8.54</td>
<td></td>
<td>51.43  42.86</td>
<td></td>
<td>0.05</td>
<td>1</td>
</tr>
<tr>
<td>Benefits of automakers bailouts will exceed their cost</td>
<td>51.95  8.64</td>
<td></td>
<td>57.58  30.30</td>
<td></td>
<td>0.06</td>
<td>0</td>
</tr>
<tr>
<td>Risky student loans</td>
<td>61.05  19.81</td>
<td></td>
<td>69.70  27.27</td>
<td></td>
<td>0.09</td>
<td>1</td>
</tr>
<tr>
<td>2009 Stimulus: benefits will exceed its costs</td>
<td>43.42  12.41</td>
<td></td>
<td>52.78  33.33</td>
<td></td>
<td>0.09</td>
<td>0</td>
</tr>
<tr>
<td>Size large banks: efficiency versus government support</td>
<td>39.45  -</td>
<td></td>
<td>17.95  76.92</td>
<td></td>
<td>0.22</td>
<td>0</td>
</tr>
<tr>
<td>CEOs are overpaid</td>
<td>66.80  9.19</td>
<td></td>
<td>39.39  51.52</td>
<td></td>
<td>0.27</td>
<td>0</td>
</tr>
<tr>
<td>2010 unemployment rate was lower thanks to automakers bailouts</td>
<td>54.82  13.06</td>
<td></td>
<td>84.85  12.12</td>
<td></td>
<td>0.30</td>
<td>0</td>
</tr>
<tr>
<td>2008 bank bailouts: benefits outweighed costs</td>
<td>38.73  12.13</td>
<td></td>
<td>69.70  15.15</td>
<td></td>
<td>0.31</td>
<td>0</td>
</tr>
<tr>
<td>Raise in federal tax rate and tax revenues</td>
<td>66.39  7.91</td>
<td></td>
<td>97.44  2.56</td>
<td></td>
<td>0.31</td>
<td>0</td>
</tr>
<tr>
<td>Large banks: size and implicit government support</td>
<td>65.27  12.13</td>
<td></td>
<td>33.33  56.41</td>
<td></td>
<td>0.32</td>
<td>0</td>
</tr>
<tr>
<td>Fannie and Freddie do not rebate subsidies through lower interest rates</td>
<td>66.79  -</td>
<td></td>
<td>31.43  60.00</td>
<td></td>
<td>0.35</td>
<td>0</td>
</tr>
<tr>
<td>Changes in US gasoline prices mainly due to market factors</td>
<td>54.31  9.17</td>
<td></td>
<td>92.31  7.69</td>
<td></td>
<td>0.38</td>
<td>0</td>
</tr>
<tr>
<td>It is hard to predict stock prices</td>
<td>55.22  15.70</td>
<td></td>
<td>100.00  0.00</td>
<td></td>
<td>0.45</td>
<td>0</td>
</tr>
<tr>
<td>2009 ARRA lowered unemployment rate</td>
<td>45.63  13.00</td>
<td></td>
<td>91.67  2.78</td>
<td></td>
<td>0.46</td>
<td>0</td>
</tr>
<tr>
<td>NAFTA increased welfare</td>
<td>46.17  15.39</td>
<td></td>
<td>94.59  5.41</td>
<td></td>
<td>0.48</td>
<td>1</td>
</tr>
<tr>
<td>Eliminating tax deductions on mortgages improves efficiency in individual financial decisions</td>
<td>35.61  15.35</td>
<td></td>
<td>89.47  5.26</td>
<td></td>
<td>0.54</td>
<td>1</td>
</tr>
<tr>
<td>“Buy American” has a positive impact on manufacturing employment</td>
<td>75.65  9.27</td>
<td></td>
<td>11.43  31.43</td>
<td></td>
<td>0.64</td>
<td>1</td>
</tr>
<tr>
<td>Healthcare sustainability</td>
<td>67.61  10.24</td>
<td></td>
<td>0.00  15.15</td>
<td></td>
<td>0.68</td>
<td>1</td>
</tr>
<tr>
<td>Carbon tax versus car standards</td>
<td>22.51  13.81</td>
<td></td>
<td>92.50  5.00</td>
<td></td>
<td>0.70</td>
<td>1</td>
</tr>
</tbody>
</table>
Miscellaneous:

Course website: bcourse

• Lecture slides
• Problem sets + other exercises
• Check regularly for announcements!
• Online discussions (e.g. on exam topics, news, etc.)

News:

• Check the Economist, NYT, WSJ, etc.
• Don’t hesitate to ask news-related questions or point to interesting articles that could be interesting for all.
GSI’s and sections

- Go to the Sections
  - Attendance taken the first week (administrative drops)
  - No attendance taken formally otherwise

- Good training for the exams and assignments

- I interact with the GSI’s to get continuous feedback on your knowledge and progress

- Three excellent GSI’s to help you this term:
  - ISABELA
  - SERGII
  - JAMES (JAY)
Contact

Thibault Fally: fally@berkeley.edu
Office: Giannini Hall (ARE) 301, third floor
Office hours: Friday 3-5pm or by appointment

Course website: bcourse

GSI’s:
Isabela: imanelici@berkeley.edu
Sergii: meleshchuk@berkeley.edu
Jay: jsayre@berkeley.edu
Now:

Some facts about international trade...

.... And various misconceptions
Definitions

• **Exports:**
  Product sold from one country to another.

• **Imports:**
  Product purchased by one country from another.

• **Trade surplus (resp. deficit):**
  Total exports minus imports (resp. imports minus exports)

• **Foreign Direct Investment (FDI):**
  Investment and control in overseas affiliates

Note: C181 is not about exchange rates.
Exchange rates, trade imbalance, etc. are the topics of Econ 182
A Misconception

“We live in a globalized world where international trade has become largely predominant.”

REALITY:

• There is not that much trade compared to domestic (local) transactions

• Especially the US

• Data: the ratio of Trade/GDP is small for most countries
<table>
<thead>
<tr>
<th>Country</th>
<th>Trade/GDP (%)</th>
<th>GDP ($ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong (China)</td>
<td>216</td>
<td>229</td>
</tr>
<tr>
<td>Singapore</td>
<td>193</td>
<td>213</td>
</tr>
<tr>
<td>Malaysia</td>
<td>85</td>
<td>247</td>
</tr>
<tr>
<td>Hungary</td>
<td>83</td>
<td>129</td>
</tr>
<tr>
<td>Thailand</td>
<td>68</td>
<td>319</td>
</tr>
<tr>
<td>Austria</td>
<td>52</td>
<td>377</td>
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<tr>
<td>Denmark</td>
<td>48</td>
<td>313</td>
</tr>
<tr>
<td>Sweden</td>
<td>46</td>
<td>463</td>
</tr>
<tr>
<td>Switzerland</td>
<td>46</td>
<td>552</td>
</tr>
<tr>
<td>Germany</td>
<td>44</td>
<td>3,284</td>
</tr>
<tr>
<td>Norway</td>
<td>35</td>
<td>418</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>32</td>
<td>2,256</td>
</tr>
<tr>
<td>Mexico</td>
<td>31</td>
<td>1,035</td>
</tr>
<tr>
<td>Canada</td>
<td>30</td>
<td>1,577</td>
</tr>
<tr>
<td>China</td>
<td>29</td>
<td>5,931</td>
</tr>
<tr>
<td>Spain</td>
<td>28</td>
<td>1,380</td>
</tr>
<tr>
<td>Italy</td>
<td>28</td>
<td>2,044</td>
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<td>South Africa</td>
<td>27</td>
<td>364</td>
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<tr>
<td>Greece</td>
<td>27</td>
<td>292</td>
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<tr>
<td>France</td>
<td>27</td>
<td>2,549</td>
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<tr>
<td>Russian Federation</td>
<td>26</td>
<td>1,488</td>
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<tr>
<td>India</td>
<td>25</td>
<td>1,684</td>
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<tr>
<td>Turkey</td>
<td>24</td>
<td>731</td>
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<tr>
<td>Indonesia</td>
<td>24</td>
<td>708</td>
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<tr>
<td>Venezuela</td>
<td>23</td>
<td>394</td>
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<tr>
<td>Argentina</td>
<td>20</td>
<td>369</td>
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<tr>
<td>Pakistan</td>
<td>17</td>
<td>176</td>
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<tr>
<td>Japan</td>
<td>15</td>
<td>5,488</td>
</tr>
<tr>
<td>United States</td>
<td>15</td>
<td>14,419</td>
</tr>
<tr>
<td>Brazil</td>
<td>11</td>
<td>2,143</td>
</tr>
</tbody>
</table>

Note: Ratio can be > 100% for some countries

Data (2010): (Import + exports) / GDP
“Globalization” over the past decades:

- Increasing flow of goods
- Increasing flow of services
- Increasing flow of capital
- Increasing flow of information, etc.

What’s new?

- Magnitude of trade flows and capital flows,
- Communication technologies
- Fragmentation of production
  (e.g. iphone production chain)
Forces shaping globalization

- **Technology**
  - Communication-enhancing
    - cell phones, email, internet, …
  - Productivity-enhancing
    - computers, containerization, …

- **Policy**
  - Trade liberalization
  - FDI liberalization
  - International migration
Yet... another misconception:

“Globalization is a new phenomenon.”

**REALITY:**

- A first Globalization episode occurred in the late 19th century
- Great Britain, Shanghai, and various other regions were truly “globalized”
Figure 1.3 Trade in Goods and Services Relative to GDP
US Merchandise Trade, percent of GDP, 1869-1997
“First Golden Age” of Trade

The period from 1890 until World War I (1914–1918) is often referred to as a “golden age” of international trade:

Dramatic improvements in transportation (e.g. steamship and railroad)

and communication (phone, telegraph)
Figure 1.4 Average Worldwide Tariffs, 1860–2010
“Second Golden Age” of Trade

In addition to the end of World War II and tariff reductions under the *General Agreement on Tariffs and Trade*, improved transportation costs contributed to the growth in trade.

E.g. shipping container invented in 1956

World trade grew steadily after 1950 in dollar terms and as a ratio to GDP. For this reason, the period after 1950 is called the “second golden age” of trade and globalization.
What do we trade?

Misconception:
“we mostly trade consumer good such as food or iphones”

REALITY:
Most trade is industrial supplies and capital goods (e.g. machinery)
Figure 1.1 (a) The Changing Face of U.S. Import and Export Industries, 1925–2010
With whom do we trade?

Misconception: “we mostly trade with low-wage countries”

REALITY:
• Most trade is between rich countries
Total world trade flows in 2010: $16,800 billion

World Trade in Goods
- < $50 billion
- $50–150 billion
- $150–500 billion
- > $500 billion

North America:
- U.S. to Canada: 248
- U.S. to Mexico: 124
- Mexico to U.S.: 12

Europe:
- Europe to U.S.: 303
- Europe to Asia: 575
- Europe to Africa: 1,050

Asia:
- Asia to Europe: 3,920
- Asia to Australia & N.Z.: 1,440

Australia & N.Z.:
- Australia & N.Z. to U.S.: 378
- Australia & N.Z. to Japan: 469

China & other Asia:
- China & other Asia to Australia & N.Z.: 2,104
- China & other Asia to Japan: 668

Latin America:
- Latin America to U.S.: 303
- Latin America to Canada: 143

Middle East:
- Middle East to U.S.: 67
- Middle East to Europe: 105

Africa:
- Africa to Europe: 50
- Africa to Middle East: 23

World:
- World to Australia & N.Z.: 1,440
- World to Asia: 947
- World to Europe: 3,920
- World to North America: 534
Distance and geography

Misconception: “The Death of Distance.”

REALITY:
• Trade is more sensitive to distance now compared to several decades ago
“The death of distance and the communications revolution will be among the most important forces shaping economies and society in the next fifty years or so.”

-Frances Cairncross, The Economist
The world is flat?

- “...what the flattening of the world means: that we are now connecting all the knowledge centers on the planet together into a single global network...”

- “Search engines flatten the world...”

- “Just as the national highway system flattened the US...and made it so much easier to relocate in lower-wage regions, like the South...the laying of global fiber highways flattened the developing world”
YET: Big gap between actual openness and what it would be without borders and without distance:

(b) Globalization gap

Source: Head and Mayer ("What separates us?" CJE 2013)
In the data:
The negative effect of distance on trade has increased

Yoto V. Yotov, Economic Letters 117 (2012)
Why distance matters

What “distance” may capture:

<table>
<thead>
<tr>
<th>Cultural</th>
<th>Administrative</th>
<th>Geographic</th>
<th>Economic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Colonial Ties</td>
<td>Physical distance</td>
<td>Endowments</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Regulation</td>
<td>Common borders</td>
<td>Market Size</td>
</tr>
<tr>
<td>Religion</td>
<td>Hostilities</td>
<td>Access to Ports</td>
<td>FX Volatility</td>
</tr>
<tr>
<td>Norms</td>
<td>Currency Regime</td>
<td>Climate</td>
<td>Infrastructure</td>
</tr>
</tbody>
</table>
Illustrating cultural distance: some mishaps

• Coors
  – “Turn it Loose” → “Suffer from Diarrhea“ (Spanish)

• Pepsi
  – “Come alive with the Pepsi generation” → “Pepsi brings your ancestors back from the grave” (Chinese)

• Perdue
  – “It takes a strong man to make a tender chicken”
  → “it takes an aroused man to make a chicken affectionate” (Spanish)

• Powergen Italia
  – First website address: www.powergenitalia.com (here)
Another misconception: FDI

**Misconception:** “Most FDI (foreign direct investment) goes towards developing countries such as China”

**REALITY:**
- It’s again mostly **to** and **from** other rich countries
Figure 1.6 Stock of Foreign Direct Investment, 2010

Total world FDI in 2010: $19,907 billion

World FDI Stocks
- < $50 billion
- $50–200 billion
- $200–1,000 billion
- > $1,000 billion

Figure 1.6 Stock of Foreign Direct Investment, 2010
In 2010 more than one-third of the world flows of FDI:
- were within Europe
- or between Europe and the United States,

... and 90% of the world flows of FDI were into or out of the OECD countries.
Two main forms of Foreign Direct Investment (FDI)

1) Horizontal FDI
   - when a firm from one country owns a company in another country to sell the same goods
   - Tends to be between industrialized countries

2) Vertical FDI
   - When a firm from a country owns a plant in another country who produced inputs for the parent company
   - Parent company tends to be in industrialized country
   - Affiliate tends to be in developing country
...and a HUGE misconception:

“Trade is a zero-sum game”
“There are winners and losers”

STRONG AGREEMENT AMONG ECONOMISTS:

• All countries gain from trade!
Other misconceptions:

- We’ll see a wide range of results that are far from obvious and may seem counter-intuitive:
  - About the gains from trade,
  - the effect of trade on wage inequalities,
  - optimal trade policy,
  - etc.

- Most of these misconceptions come from **partial-equilibrium** analysis as opposed to **general equilibrium**

  - For instance:
    The *more* productive a country, the *less* it gains from trade.
Contact

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